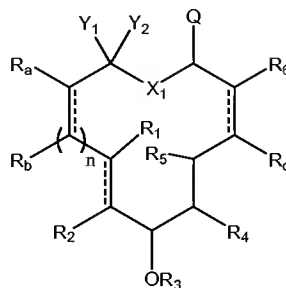


AMENDMENTS TO THE CLAIMS

The following **Listing of Claims** will replace all prior versions, and listings of claims in the application.

1. **(CURRENTLY AMENDED)** A pharmaceutical composition comprising:
a pharmaceutically acceptable carrier, adjuvant or vehicle; and
a therapeutically effective amount of a compound having the structure:



(I)

or pharmaceutically acceptable salt thereof;

wherein **R₁** and **R₂** are each independently hydrogen, halogen, -CN, -S(O)₁₋₂R^{1A}, -NO₂, -COR^{1A}, -CO₂R^{1A}, -NR^{1A}C(=O)R^{1B}, -NR^{1A}C(=O)OR^{1B}, -CONR^{1A}R^{1B}, an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety, or -WR^{1A}; wherein W is independently -O-, -S- or -NR^{1C}-, wherein each occurrence of R^{1A}, R^{1B} and R^{1C} is independently hydrogen, or an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety; or R₁ and R₂, taken together with the carbon atoms to which they are attached, form an alicyclic, heteroalicyclic, aryl or heteroaryl moiety;

R₃ is hydrogen, an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety; or a prodrug moiety or an oxygen protecting group;

R₄ is halogen, -OR^{4A}, -OC(=O)R^{4A} or -NR^{4A}R^{4B}; wherein R^{4A} and R^{4B} are independently hydrogen, an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety; a prodrug moiety, a nitrogen protecting group or an oxygen protecting group; or R^{4A} and R^{4B}, taken together with the nitrogen atom to which they are attached, form a heterocyclic or heteroaryl moiety;

R₅ is hydrogen, an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety;

R₆ is hydrogen, halogen, -CN, -S(O)₁₋₂R^{6A}, -NO₂, -COR^{6A}, -CO₂R^{6A}, -NR^{6A}C(=O)R^{6B}, -NR^{6A}C(=O)OR^{6B}, -CONR^{6A}R^{6B}, an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety, or -WR^{6A}; wherein W is independently -O-, -S- or -NR^{6C}-, wherein each occurrence of R^{6A}, R^{6B} and R^{6C} is independently hydrogen, or an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or

heteroaryl moiety; or R₆ and R_e, taken together with the carbon atoms to which they are attached, form an alicyclic, heteroalicyclic, aryl or heteroaryl moiety;

R_a and each occurrence of R_b are independently hydrogen, halogen, -CN, -S(O)₁₋₂R^{a1}, -NO₂, -COR^{a1}, -CO₂R^{a1}, -NR^{a1}C(=O)R^{a2}, -NR^{a1}C(=O)OR^{a2}, -CONR^{a1}R^{a2}, an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety, or -WR^{a1}; wherein W is independently -O-, -S- or -NR^{a3}-, wherein each occurrence of R^{a1}, R^{a2} and R^{a3} is independently hydrogen, or an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety; or R_a and the adjacent occurrence of R_b, taken together with the carbon atoms to which they are attached, form an alicyclic, heteroalicyclic, aryl or heteroaryl moiety;

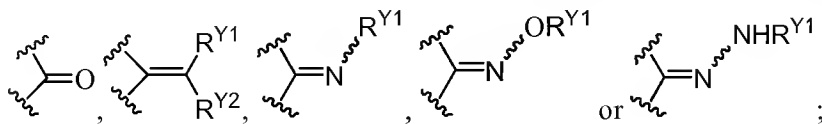
R_c is hydrogen, halogen, -CN, -S(O)₁₋₂R^{c1}, -NO₂, -COR^{c1}, -CO₂R^{c1}, -NR^{c1}C(=O)R^{c2}, -NR^{c1}C(=O)OR^{c2}, -CONR^{c1}R^{c2}; an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety, or -WR^{c1}; wherein W is independently -O-, -S- or -NR^{c3}-, wherein each occurrence of R^{c1}, R^{c2} and R^{c3} is independently hydrogen, or an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety; or R_c and R₆, taken together with the carbon atoms to which they are attached, form an alicyclic, heteroalicyclic, aryl or heteroaryl moiety;

n is an integer from 1 to 5;

X₁ is O, S, NR^{X1} or CR^{X1}R^{X2}; wherein R^{X1} and R^{X2} are independently hydrogen, halogen, an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety, or a nitrogen protecting group;

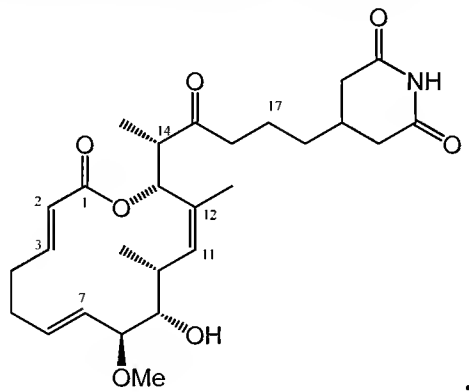
Q is hydrogen, halogen, -CN, -S(O)₁₋₂R^{Q1}, -NO₂, -COR^{Q1}, -CO₂R^{Q1}, -NR^{Q1}C(=O)R^{Q2}, -NR^{Q1}C(=O)OR^{Q2}, -CONR^{Q1}R^{Q2}, an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety, or -WR^{Q1}; wherein W is independently -O-, -S- or -NR^{Q3}-, wherein each occurrence of R^{Q1}, R^{Q2} and R^{Q3} is independently hydrogen, or an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety; and

Y₁ and Y₂ are independently hydrogen, an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety; or -WR^{Y1}; wherein W is independently -O-, -S- or -NR^{Y2}-, wherein each occurrence of R^{Y1} and R^{Y2} is independently hydrogen, or an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety; or Y₁ and Y₂ together with the carbon atom to which they are attached form a moiety having the structure:



whereby the composition is formulated for administration to a subject at a dosage between about 0.1 mg/kg to about 50 mg/kg of body weight,

with the proviso that the compound does not have the following structure:



2. (ORIGINAL) The composition of claim 1, wherein the dosage is between about 1 mg/kg to about 50 mg/kg of body weight.
3. (ORIGINAL) The composition of claim 1, wherein the dosage is between about 0.1 mg/kg to about 40 mg/kg of body weight.
4. (ORIGINAL) The composition of claim 1, wherein the dosage is between about 1 mg/kg to about 40 mg/kg of body weight.
5. (ORIGINAL) The composition of claim 1, wherein the dosage is between about 0.1 mg/kg to about 30 mg/kg of body weight.
6. (ORIGINAL) The composition of claim 1, wherein the dosage is between about 5 mg/kg to about 30 mg/kg of body weight.
7. (ORIGINAL) The composition of claim 1, wherein the dosage is between about 1 mg/kg to about 30 mg/kg of body weight.
8. (ORIGINAL) The composition of claim 1, wherein the dosage is between about 0.1 mg/kg to about 20 mg/kg of body weight.

9. (ORIGINAL) The composition of claim 1, wherein the dosage is between about 1 mg/kg to about 20 mg/kg of body weight.

10. (ORIGINAL) The composition of claim 1, wherein the dosage is 10 mg/kg or greater of body weight.

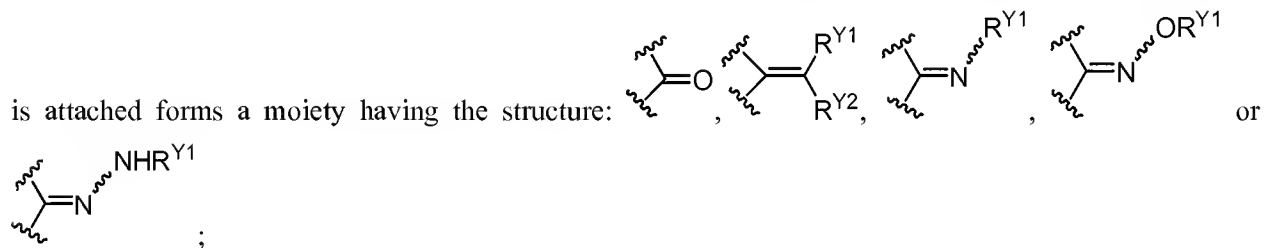
11. (ORIGINAL) The composition of claim 1, wherein:

R₁ and **R₂** are each independently hydrogen or substituted or unsubstituted lower alkyl; or **R₁** and **R₂**, taken together with the carbon atoms to which they are attached, form an epoxide, an aziridine or a substituted or unsubstituted cyclopropyl moiety;

R₃ is hydrogen, or substituted or unsubstituted lower alkyl or aryl; a prodrug moiety or an oxygen protecting group;

R₄ is halogen, -OR^{4A}, -OC(=O)R^{4A} or -NR^{4A}R^{4B}; wherein R^{4A} and R^{4B} are independently hydrogen, or substituted or unsubstituted lower alkyl; a prodrug moiety, a nitrogen protecting group or an oxygen protecting group; or R^{4A} and R^{4B}, taken together with the nitrogen atom to which they are attached, form a heterocyclic or heteroaryl moiety; or R₄, taken together with the carbon atom to which it

is attached forms a moiety having the structure:



The image shows five chemical structures representing different moieties that can be formed by R₄. Each structure has wavy lines indicating attachment points. The structures are: 1. An enone moiety: a carbon double-bonded to an oxygen atom and single-bonded to another carbon, which is further double-bonded to a third carbon. 2. An enone moiety with two substituents: a carbon double-bonded to an oxygen atom and single-bonded to another carbon, which is further double-bonded to a third carbon, with two substituents labeled R^{Y1} and R^{Y2}. 3. An imine moiety: a carbon double-bonded to a nitrogen atom, which is further single-bonded to a third carbon, with a substituent labeled R^{Y1}. 4. An imine moiety with an OR^{Y1} group: a carbon double-bonded to a nitrogen atom, which is further single-bonded to a third carbon, with a substituent labeled OR^{Y1}. 5. An imine moiety with an NHR^{Y1} group: a carbon double-bonded to a nitrogen atom, which is further single-bonded to a third carbon, with a substituent labeled NHR^{Y1}. The word "or" is placed to the right of the fourth structure, and a semicolon is placed to the right of the fifth structure.

R₅ and **R₆** are each independently hydrogen or substituted or unsubstituted lower alkyl; or **R₆** and **R₆**, taken together with the carbon atoms to which they are attached, form an epoxide, an aziridine or a substituted or unsubstituted cyclopropyl moiety;

R_a and each occurrence of **R_b** are independently hydrogen, halogen, alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl moiety, or -WR^{a1}; wherein W is independently -O-, -S- or -NR^{a3}-, wherein each occurrence of R^{a1}, and R^{a3} is independently hydrogen, or an alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl moiety; or R_a and the adjacent occurrence of R_b, taken together, form an epoxide, an aziridine or a substituted or unsubstituted cyclopropyl moiety;

R_c is hydrogen, halogen, alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl moiety, or -WR^{c1}; wherein W is independently -O-, -S- or -NR^{c3}-, wherein each occurrence of R^{c1} and R^{c3} is independently hydrogen, or an alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl

moiety; or R_c and R_6 , taken together with the carbon atoms to which they are attached, form an epoxide, an aziridine or a substituted or unsubstituted cyclopropyl moiety;

n is an integer from 1 to 5;

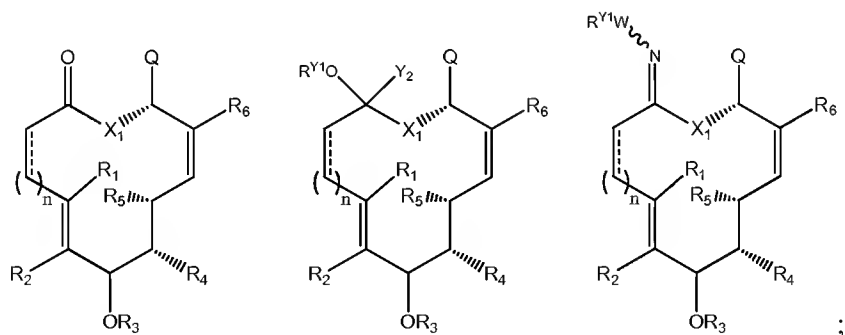
X_1 is O, S, NR^{X1} or $CR^{X1}R^{X2}$; wherein R^{X1} and R^{X2} are independently hydrogen, halogen, substituted or unsubstituted alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl, or a nitrogen protecting group;

Q is hydrogen, halogen, $-CN$, $-S(O)_{1-2}R^{Q1}$, $-NO_2$, $-COR^{Q1}$, $-CO_2R^{Q1}$, $-NR^{Q1}C(=O)R^{Q2}$, $-NR^{Q1}C(=O)OR^{Q2}$, $-CONR^{Q1}R^{Q2}$, an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety, or $-WR^{Q1}$; wherein W is independently $-O-$, $-S-$ or $-NR^{Q3}-$, wherein each occurrence of R^{Q1} , R^{Q2} and R^{Q3} is independently hydrogen, or an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety;

Y_1 and Y_2 are independently hydrogen, an alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl moiety; or $-WR^{Y1}$; wherein W is independently $-O-$, $-S-$ or $-NR^{Y2}-$, wherein each occurrence of R^{Y1} and R^{Y2} is independently hydrogen, or an alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl moiety; or Y_1 and Y_2 together with the carbon atom to which they are attached form a moiety

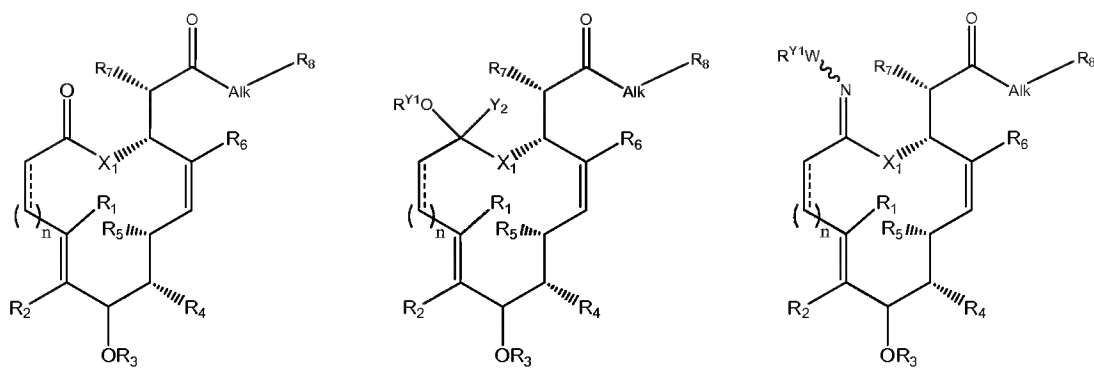
having the structure:

12. **(ORIGINAL)** The composition of claim 1, wherein R_a , R_b and R_c are each hydrogen, and the compound has one of the following structures:



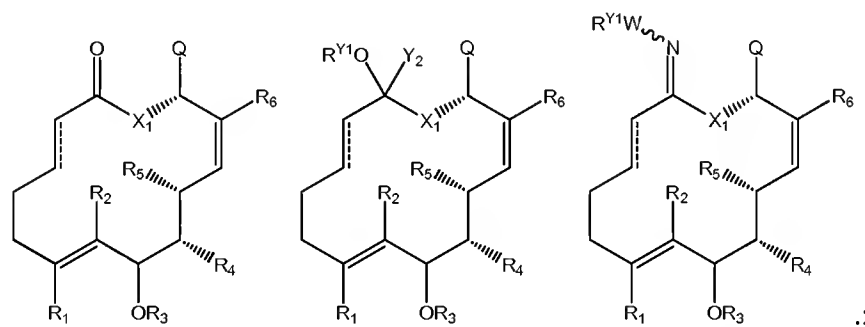
wherein R_1 - R_6 , Y_2 , X_1 , n and Q are as defined in claim 1; W is O or NH; and R^{Y1} is hydrogen, or an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety.

13. **(ORIGINAL)** The composition of claim 1, wherein R_a , R_b and R_c are each hydrogen, Q is a carbonyl-containing moiety and the compound has one of the following structures:



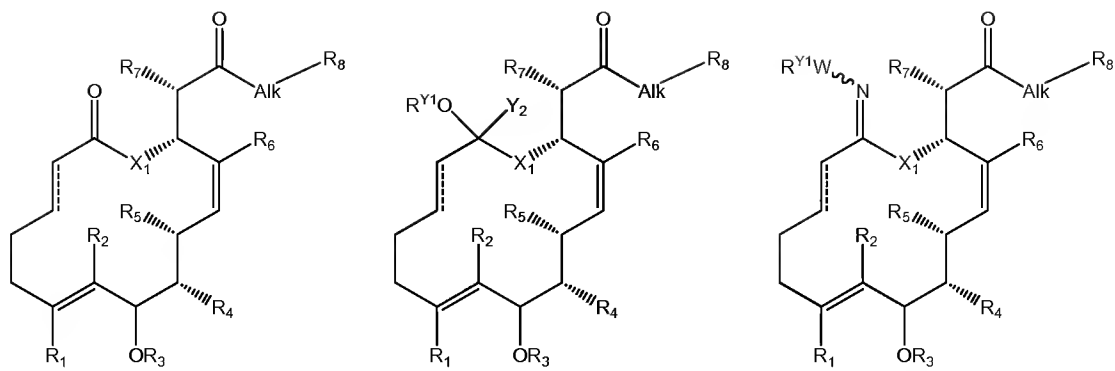
wherein R_1 - R_6 , Y_2 , X_1 , and n are as defined in claim 1; W is O or NH; and R^{Y1} is hydrogen, or an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety; R_7 is a substituted or unsubstituted lower alkyl or heteroalkyl moiety; R_8 is a substituted or unsubstituted alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl moiety; and Alk is a substituted or unsubstituted C_{0-6} alkylidene or C_{0-6} alkenylidene chain wherein up to two non-adjacent methylene units are independently optionally replaced by CO, CO_2 , COCO, $CONR^{Z1}$, $OCONR^{Z1}$, $NR^{Z1}NR^{Z2}$, $NR^{Z1}NR^{Z2}CO$, $NR^{Z1}CO$, $NR^{Z1}CO_2$, $NR^{Z1}CONR^{Z2}$, SO, SO_2 , $NR^{Z1}SO_2$, SO_2NR^{Z1} , $NR^{Z1}SO_2NR^{Z2}$, O, S, or NR^{Z1} ; wherein each occurrence of R^{Z1} and R^{Z2} is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl or acyl.

14. **(ORIGINAL)** The composition of claim 1, wherein R_a , R_b and R_c are each hydrogen, n is 3 and the compound has one of the following structures:



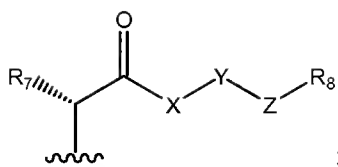
wherein R_1 - R_6 , Y_2 , Q and X_1 are as defined in claim 1; W is O or NH; and R^{Y1} is hydrogen, or an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety.

15. **(ORIGINAL)** The composition of claim 1, wherein R_a , R_b and R_c are each hydrogen, n is 3, Q is a carbonyl-containing moiety, and the compound has one of the following structures:



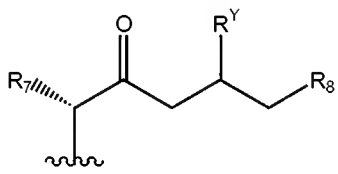
wherein R_1 - R_6 , X_1 and Y_2 are as defined in claim 1; W is O or NH ; R^{Y1} is hydrogen, or an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety; R_7 is a substituted or unsubstituted lower alkyl or heteroalkyl moiety; R_8 is a substituted or unsubstituted alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl moiety; and Alk is a substituted or unsubstituted C_{0-6} alkylidene or C_{0-6} alkenylidene chain wherein up to two non-adjacent methylene units are independently optionally replaced by CO , CO_2 , $COCO$, $CONR^{Z1}$, $OCONR^{Z1}$, $NR^{Z1}NR^{Z2}$, $NR^{Z1}NR^{Z2}CO$, $NR^{Z1}CO$, $NR^{Z1}CO_2$, $NR^{Z1}CONR^{Z2}$, SO , SO_2 , $NR^{Z1}SO_2$, SO_2NR^{Z1} , $NR^{Z1}SO_2NR^{Z2}$, O , S , or NR^{Z1} ; wherein each occurrence of R^{Z1} and R^{Z2} is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl or acyl; and R_8 is a substituted or unsubstituted alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl moiety.

16. **(PREVIOUSLY PRESENTED)** The composition of claim 1, wherein R_1 and R_2 are each hydrogen.
17. **(PREVIOUSLY PRESENTED)** The composition of claim 1, wherein R_5 and R_6 are each methyl.
18. **(PREVIOUSLY PRESENTED)** The composition of claim 1, wherein R_3 is lower alkyl.
19. **(ORIGINAL)** The composition of claim 18, wherein R_3 is methyl.
20. **(PREVIOUSLY PRESENTED)** The composition of claim 1, wherein R_4 is OH , NH_2 or halogen.
21. **(ORIGINAL)** The composition of claim 13 or 15, wherein R_7 is lower alkyl.
22. **(ORIGINAL)** The composition of claim 21, wherein R_7 is methyl.
23. **(PREVIOUSLY PRESENTED)** The composition of claim 1, wherein Q has the structure:



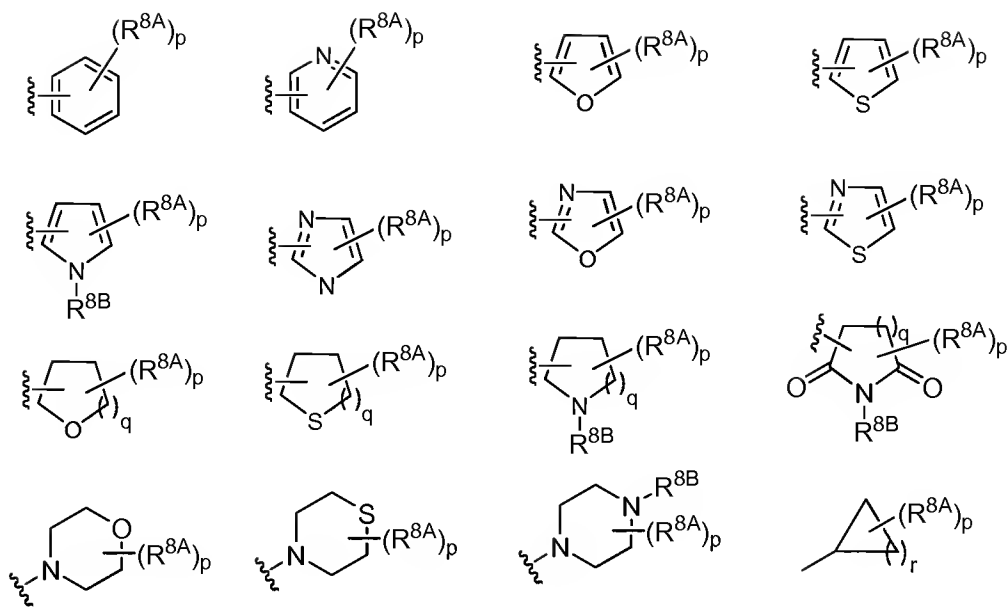
wherein R_7 is a substituted or unsubstituted, linear or branched, cyclic or acyclic lower alkyl moiety; R_8 is a substituted or unsubstituted carbocyclic, heterocyclic, aryl or heteroaryl moiety; and X, Y and Z are independently a bond, -O-, -S-, -C(=O)-, -NR^{Z1}-, -CHOR^{Z1}, -CHNR^{Z1}R^{Z2}, C=S, C=N(R^{Y1}) or -CH(Hal); or a substituted or unsubstituted C₀₋₆alkylidene or C₀₋₆alkenylidene chain wherein up to two non-adjacent methylene units are independently optionally replaced by CO, CO₂, COCO, CONR^{Z1}, OCONR^{Z1}, NR^{Z1}NR^{Z2}, NR^{Z1}NR^{Z2}CO, NR^{Z1}CO, NR^{Z1}CO₂, NR^{Z1}CONR^{Z2}, SO, SO₂, NR^{Z1}SO₂, SO₂NR^{Z1}, NR^{Z1}SO₂NR^{Z2}, O, S, or NR^{Z1}; wherein Hal is a halogen selected from F, Cl, Br and I; and each occurrence of R^{Z1} and R^{Z2} is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl or acyl; or R^{Z1} and R^{Z2}, taken together with the nitrogen atom to which they are attached, for a heterocyclic or heteroaryl moiety; and pharmaceutically acceptable derivatives thereof.

24. **(ORIGINAL)** The composition of claim 23, wherein Q has the structure:



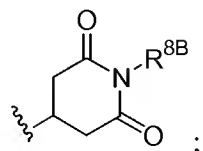
wherein R_7 is a substituted or unsubstituted, linear or branched, cyclic or acyclic lower alkyl moiety; R_8 is a substituted or unsubstituted carbocyclic, heterocyclic, aryl or heteroaryl moiety; and R^Y is hydrogen, halogen, -OR^{Y1} or -NR^{Y1}NR^{Y2}; wherein R^{Y1} and R^{Y2} are independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl or acyl, or R^{Y1} and R^{Y2} , taken together with the nitrogen atom to which they are attached, for a heterocyclic or heteroaryl moiety.

25. **(PREVIOUSLY PRESENTED)** The composition claim 13, wherein R_8 is one of:



wherein p is an integer from 0 to 5; q is 1 or 2, r is an integer from 1 to 6; each occurrence of R^{8A} is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl, -(alkyl)aryl or -(alkyl)heteroaryl, -OR^{8C}, -SR^{8C}, -N(R^{8C})₂, -SO₂N(R^{8C})₂, -(C=O)N(R^{8C})₂, halogen, -CN, -NO₂, -(C=O)OR^{8C}, -N(R^{8C})(C=O)R^{8D}, wherein each occurrence of R^{8C} and R^{8D} is independently hydrogen, lower alkyl, lower heteroalkyl, aryl, heteroaryl, -(alkyl)aryl or -(alkyl)heteroaryl; and each occurrence of R^{8B} is independently hydrogen or lower alkyl.

26. **(ORIGINAL)** The composition of claim 25, wherein R₈ has the structure:



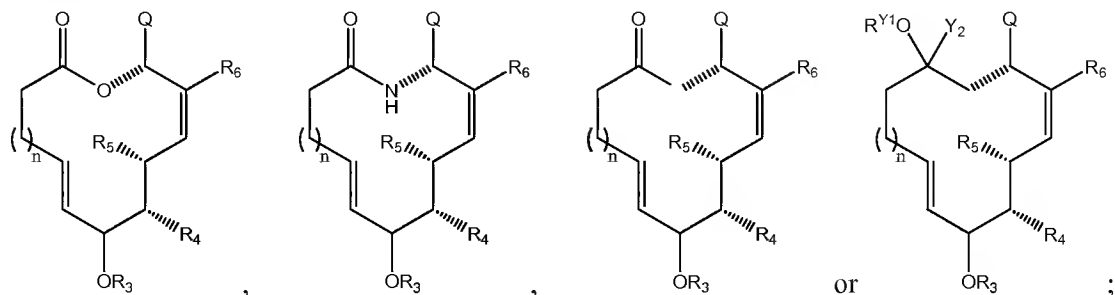
wherein R^{8B} is hydrogen or lower alkyl.

27. **(PREVIOUSLY PRESENTED)** The composition of claim 1 wherein n is 3.

28. **(PREVIOUSLY PRESENTED)** The composition of claim 12 wherein Y₁ is OR^{Y1} and Y₂ is lower alkyl; wherein R^{Y1} is hydrogen or lower alkyl.

29. **(ORIGINAL)** The composition of claim 28, wherein Y₁ is OH and Y₂ is CF₃.

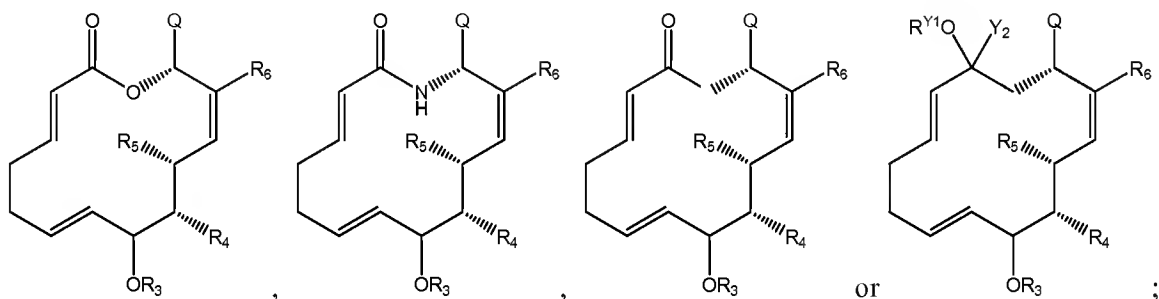
30. **(ORIGINAL)** The composition of claim 11 wherein R_a , R_b and R_c are each hydrogen, and the compound has one of the structures:



or pharmaceutically acceptable derivative thereof;

wherein R_3 - R_6 , n and Q are as defined in claim 1; and Y_2 and R^{Y1} are independently hydrogen or lower alkyl.

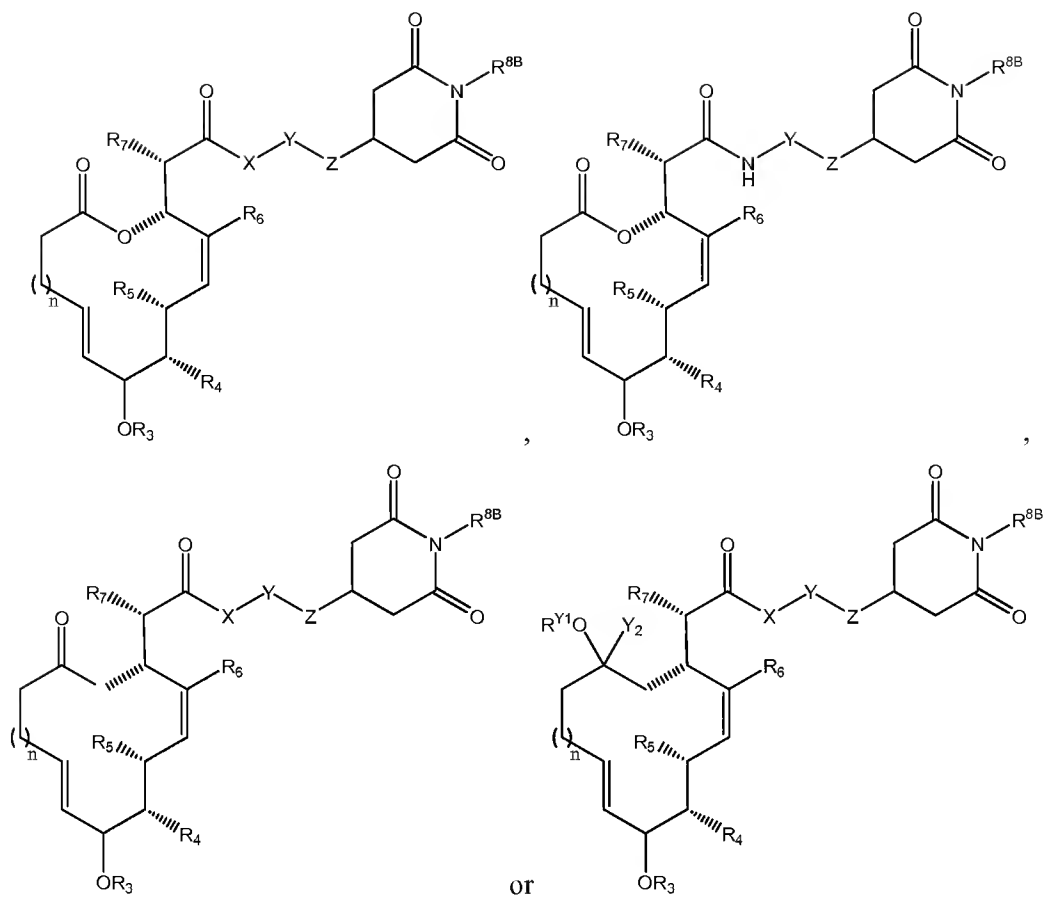
31. **(ORIGINAL)** The composition of claim 1 wherein the compound has the structure:



or pharmaceutically acceptable derivative thereof;

wherein R_3 - R_6 and Q are as defined in claim 11; and Y_2 and R^{Y1} are independently hydrogen or lower alkyl.

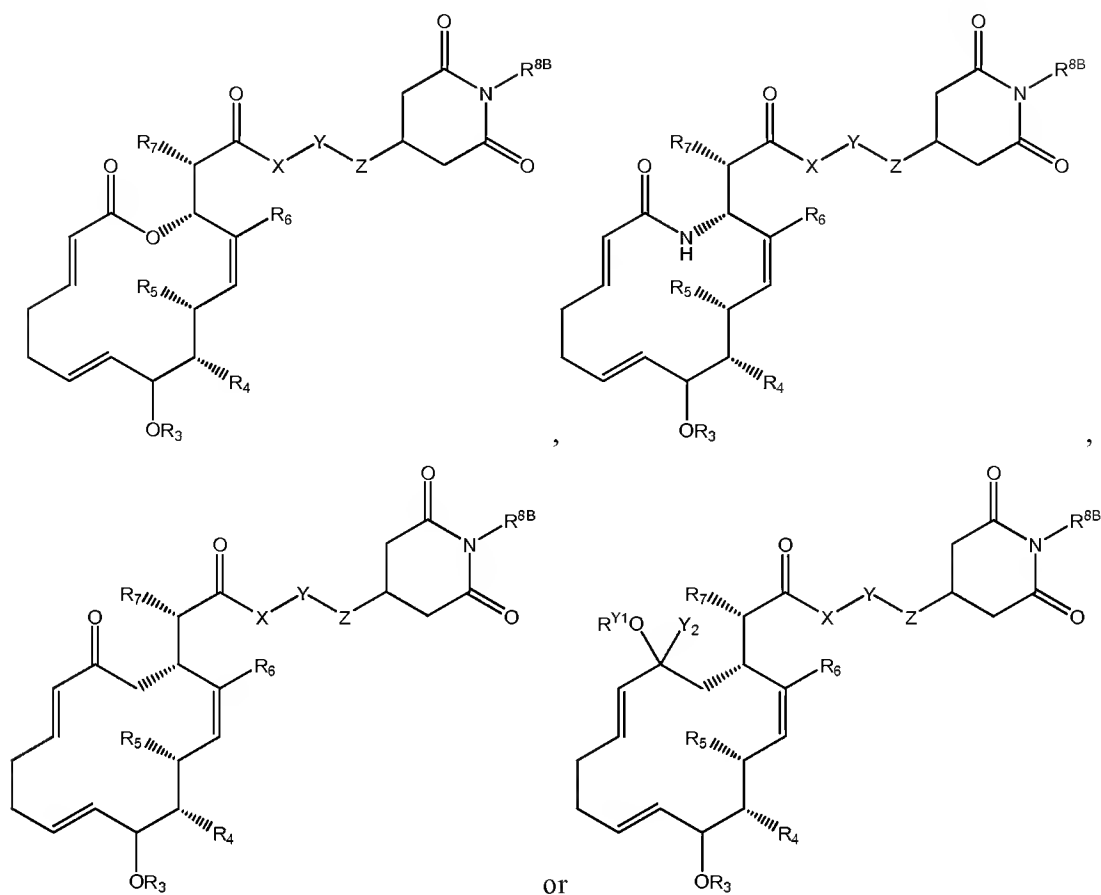
32. **(ORIGINAL)** The composition of claim 11 wherein the compound has the structure:



or pharmaceutically acceptable derivative thereof;

wherein R_3 - R_6 and n are as defined in claim 11; Y_2 and R^{Y1} are independently hydrogen or lower alkyl; R_7 is a substituted or unsubstituted, linear or branched, cyclic or acyclic lower alkyl moiety; R^{8B} is hydrogen or lower alkyl; and X , Y and Z are independently a bond, $-O-$, $-S-$, $-C(=O)-$, $-NR^{Z1}-$, $-\text{CHOR}^{Z1}$, $-\text{CHNR}^{Z1}R^{Z2}$, $C=S$, $C=N(R^{Y1})$ or $-\text{CH}(\text{Hal})$; or a substituted or unsubstituted C_{0-6} alkylidene or C_{0-6} alkenylidene chain wherein up to two non-adjacent methylene units are independently optionally replaced by CO , CO_2 , COCO , CONR^{Z1} , OCONR^{Z1} , $\text{NR}^{Z1}\text{NR}^{Z2}$, $\text{NR}^{Z1}\text{NR}^{Z2}\text{CO}$, NR^{Z1}CO , $\text{NR}^{Z1}\text{CO}_2$, $\text{NR}^{Z1}\text{CONR}^{Z2}$, SO , SO_2 , $\text{NR}^{Z1}\text{SO}_2$, $\text{SO}_2\text{NR}^{Z1}$, $\text{NR}^{Z1}\text{SO}_2\text{NR}^{Z2}$, O , S , or NR^{Z1} ; wherein Hal is a halogen selected from F , Cl , Br and I ; and each occurrence of R^{Z1} and R^{Z2} is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl or acyl; or R^{Z1} and R^{Z2} , taken together with the nitrogen atom to which they are attached, for a heterocyclic or heteroaryl moiety.

33. **(ORIGINAL)** The composition of claim 11 wherein the compound has the structure:



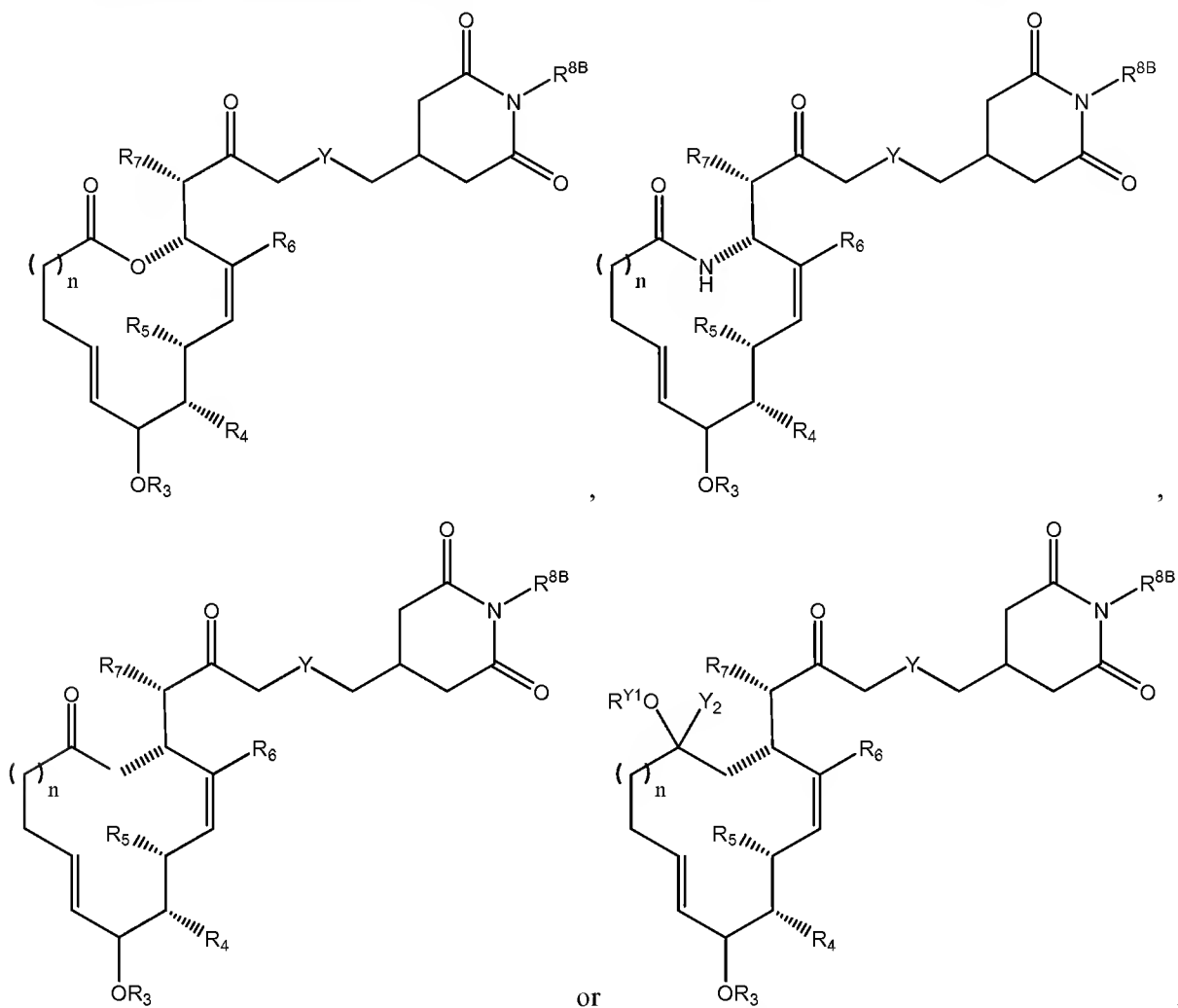
or pharmaceutically acceptable derivative thereof;

wherein R_3 - R_6 are as defined in claim 11; Y_2 and R^{Y1} are independently hydrogen or lower alkyl; R_7 is a substituted or unsubstituted, linear or branched, cyclic or acyclic lower alkyl moiety; R^{8B} is hydrogen or lower alkyl; and X, Y and Z are independently a bond, -O-, -S-, -C(=O)-, -NR^{Z1}-, -CHOR^{Z1}-, -CHNR^{Z1}R^{Z2}-, C=S, C=N(R^{Y1}) or -CH(Hal); or a substituted or unsubstituted C₀₋₆alkylidene or C₀₋₆alkenylidene chain wherein up to two non-adjacent methylene units are independently optionally replaced by CO, CO₂, COCO, CONR^{Z1}, OCONR^{Z1}, NR^{Z1}NR^{Z2}, NR^{Z1}NR^{Z2}CO, NR^{Z1}CO, NR^{Z1}CO₂, NR^{Z1}CONR^{Z2}, SO, SO₂, NR^{Z1}SO₂, SO₂NR^{Z1}, NR^{Z1}SO₂NR^{Z2}, O, S, or NR^{Z1}, wherein Hal is a halogen selected from F, Cl, Br and I; and each occurrence of R^{Z1} and R^{Z2} is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl or acyl; or R^{Z1} and R^{Z2}, taken together with the nitrogen atom to which they are attached, for a heterocyclic or heteroaryl moiety.

34. **(ORIGINAL)** The composition of claim 32 or 33, wherein -X-Y-Z together represents the moiety -CH₂-Y-CH₂-; wherein Y is -CHOR^{Y1}-, -CHNR^{Y1}R^{Y2}-, C=O, C=S, C=N(R^{Y1}) or -CH(Hal); wherein Hal is

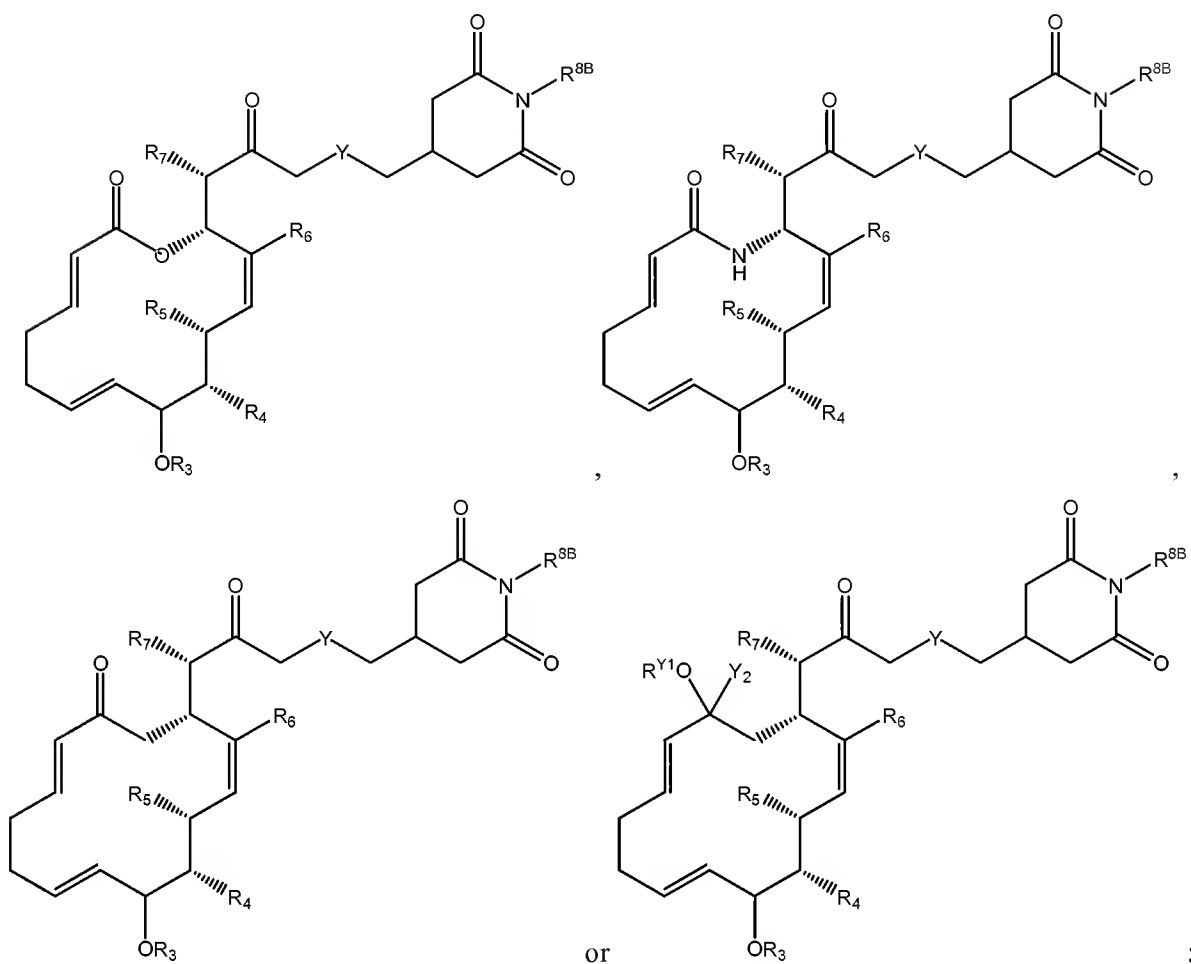
a halogen selected from F, Cl, Br and I; and R^{Y1} and R^{Y2} are independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl or acyl, or R^{Y1} and R^{Y2} , taken together with the nitrogen atom to which they are attached, for a heterocyclic or heteroaryl moiety.

35. **(ORIGINAL)** The composition of claim 11 wherein the compound has the structure:



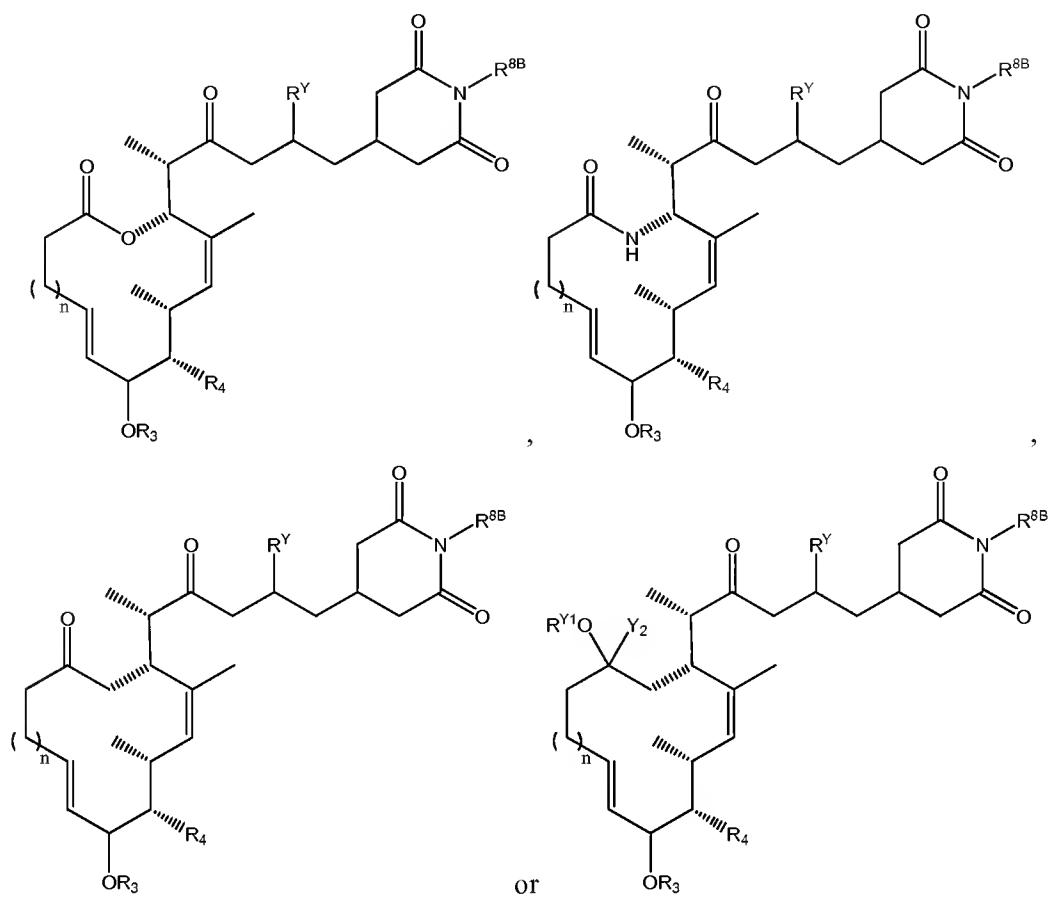
wherein R_3 - R_6 and n are as defined in claim 11; Y_2 and R^{Y1} are independently hydrogen or lower alkyl; R_7 is a substituted or unsubstituted, linear or branched, cyclic or acyclic lower alkyl moiety; R^{8B} is hydrogen or lower alkyl; and Y is $-\text{CHOR}^{Y1}$, $-\text{CHNR}^{Y1}\text{R}^{Y2}$, $\text{C}=\text{O}$, $\text{C}=\text{S}$, $\text{C}=\text{N}(\text{R}^{Y1})$ or $-\text{CH}(\text{Hal})$; wherein Hal is a halogen selected from F, Cl, Br and I; and R^{Y1} and R^{Y2} are independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl or acyl, or R^{Y1} and R^{Y2} , taken together with the nitrogen atom to which they are attached, for a heterocyclic or heteroaryl moiety.

36. (ORIGINAL) The composition of claim 11 wherein the compound has the structure:



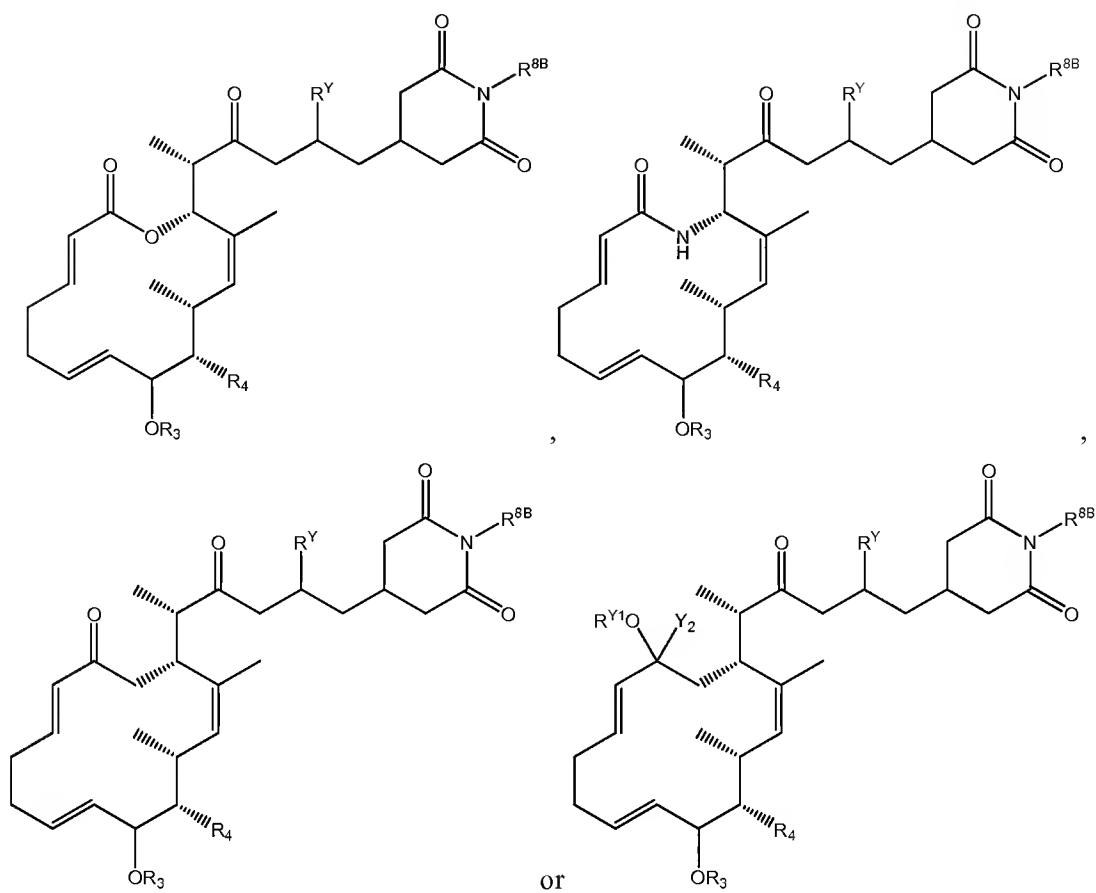
wherein R_3 - R_6 are as defined in claim 11; Y_2 and R^{Y1} are independently hydrogen or lower alkyl; R_7 is a substituted or unsubstituted, linear or branched, cyclic or acyclic lower alkyl moiety; R^{8B} is hydrogen or lower alkyl; and Y is $-\text{CHOR}^{Y1}$, $-\text{CHNR}^{Y1}\text{R}^{Y2}$, $\text{C}=\text{O}$, $\text{C}=\text{S}$, $\text{C}=\text{N}(\text{R}^{Y1})$ or $-\text{CH}(\text{Hal})$; wherein Hal is a halogen selected from F, Cl, Br and I; and R^{Y1} and R^{Y2} are independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl or acyl, or R^{Y1} and R^{Y2} , taken together with the nitrogen atom to which they are attached, for a heterocyclic or heteroaryl moiety.

37. (ORIGINAL) The composition of claim 11 wherein the compound has the structure:



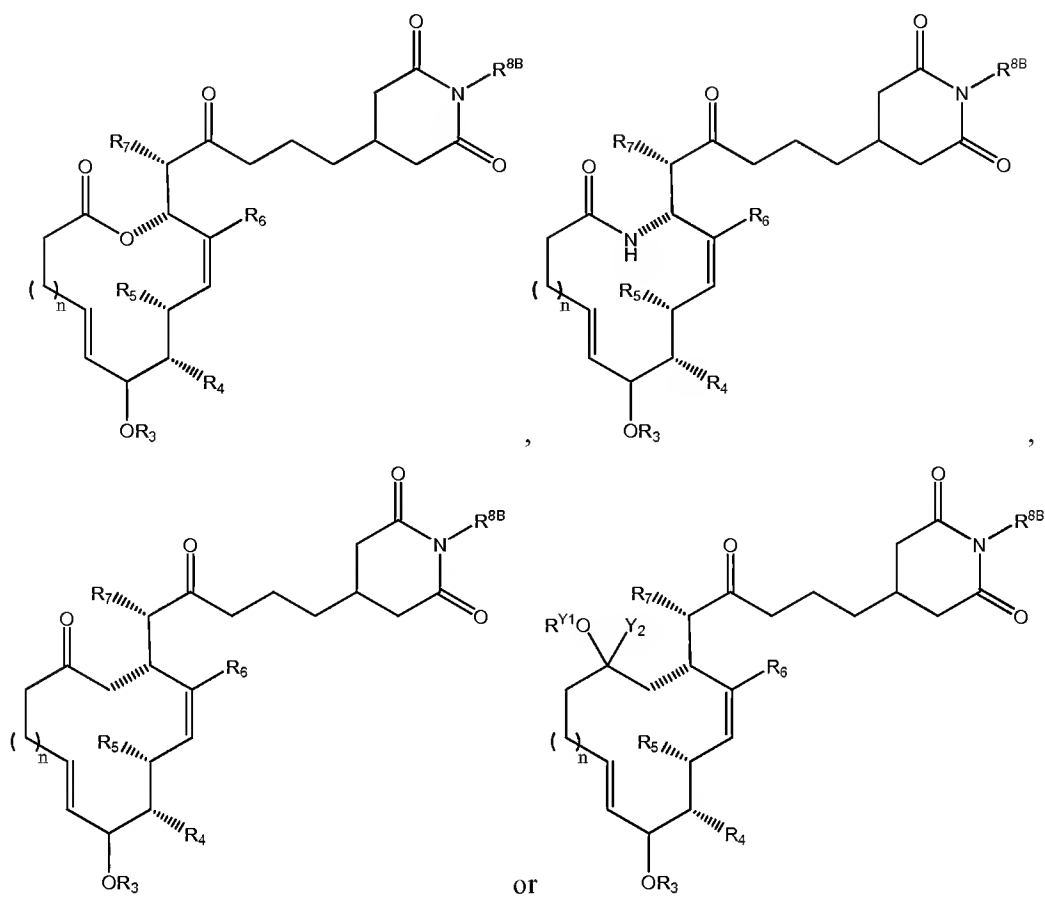
wherein n , R_3 and R_4 are as defined in claim 11; Y_2 and R^{Y1} are independently hydrogen or lower alkyl; R^{8B} is hydrogen or lower alkyl; and R^Y is hydrogen, halogen, $-OR^{Y1}$ or $-NR^{Y1}NR^{Y2}$; wherein R^{Y1} and R^{Y2} are independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl or acyl, or R^{Y1} and R^{Y2} , taken together with the nitrogen atom to which they are attached, for a heterocyclic or heteroaryl moiety.

38. (ORIGINAL) The composition of claim 11 wherein the compound has the structure:



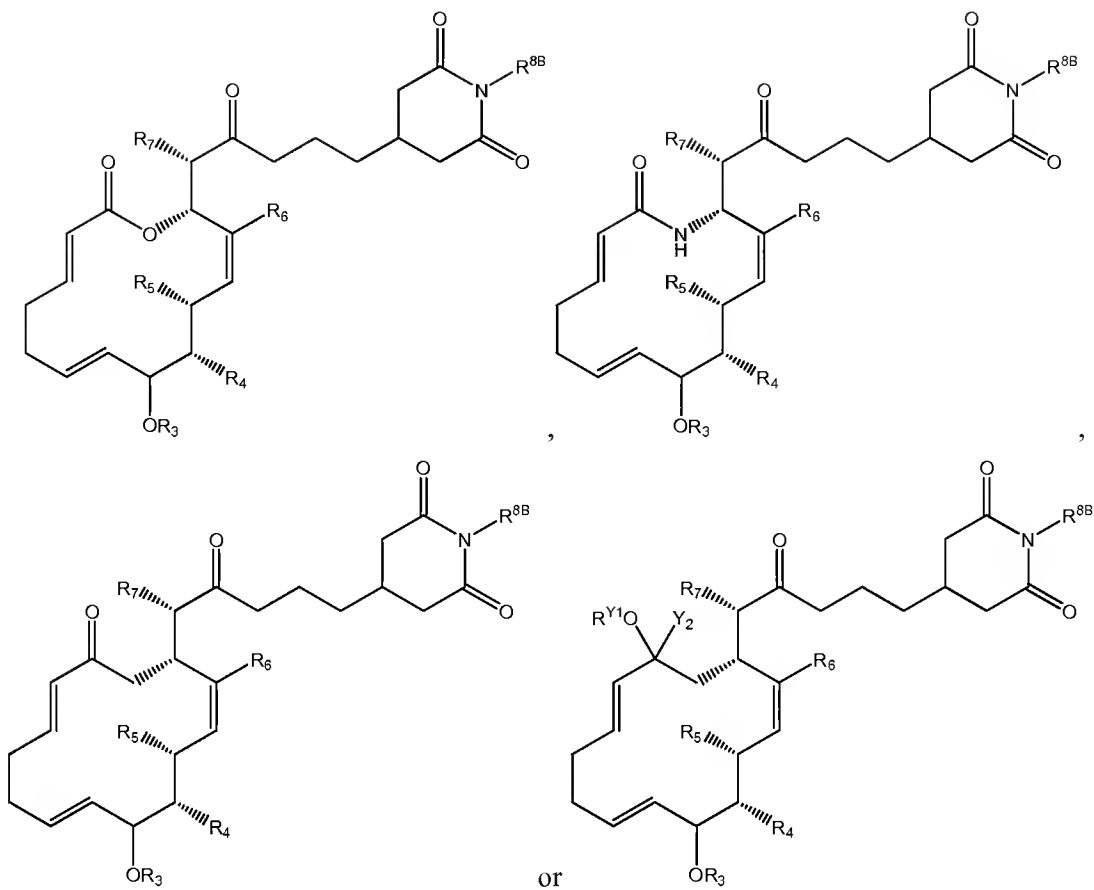
wherein R_3 and R_4 are as defined in claim 11; Y_2 and R^{Y1} are independently hydrogen or lower alkyl; R^{8B} is hydrogen or lower alkyl; and R^Y is hydrogen, halogen, $-OR^{Y1}$ or $-NR^{Y1}NR^{Y2}$; wherein R^{Y1} and R^{Y2} are independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl or acyl, or R^{Y1} and R^{Y2} , taken together with the nitrogen atom to which they are attached, for a heterocyclic or heteroaryl moiety.

39. (ORIGINAL) The composition of claim 11 wherein the compound has the structure:



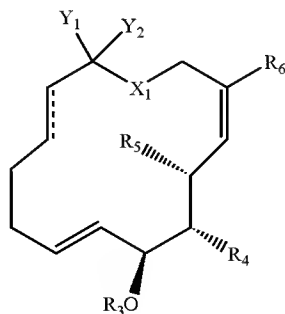
wherein R_3 - R_6 and n are as defined in claim 11; Y_2 and R^{Y1} are independently hydrogen or lower alkyl; R_7 is a substituted or unsubstituted, linear or branched, cyclic or acyclic lower alkyl moiety; and R^{8B} is hydrogen or lower alkyl.

40. (ORIGINAL) The composition of claim 11 wherein the compound has the structure:



wherein R_3 - R_6 are as defined in claim 11; Y_2 and R^{Y1} are independently hydrogen or lower alkyl; R_7 is a substituted or unsubstituted, linear or branched, cyclic or acyclic lower alkyl moiety; and R^{8B} is hydrogen or lower alkyl.

41. **(ORIGINAL)** The composition of claim 11 wherein the compound has the following structure:



or a pharmaceutically acceptable salt thereof;

wherein X_1 is CH_2 , NH or O ;

Y_1 and Y_2 are independently OH , $C(R^{Y1})_3$ or Y_1 and Y_2 taken together with the carbon atom to which they are attached are $-C=O$, wherein R^{Y1} is halo;

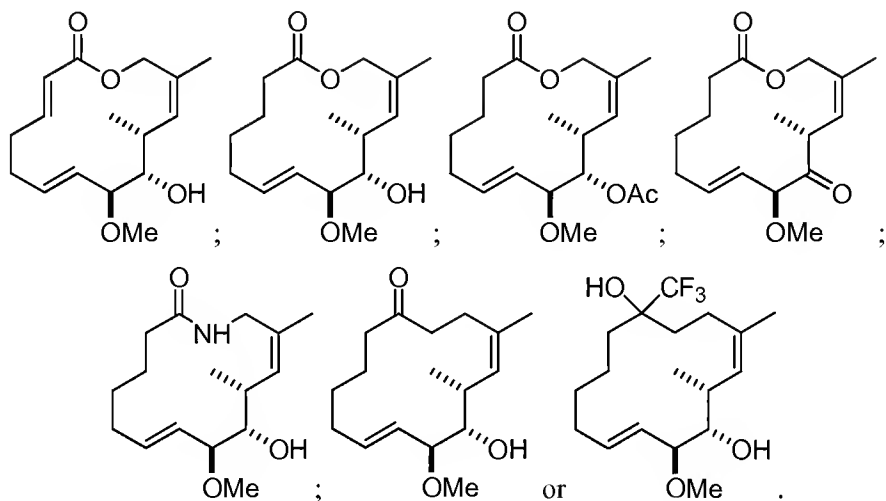
R₆ is H or lower alkyl;

R₅ is H or lower alkyl;

R₄ is OH; and

R₃ is alkyl.

42. **(ORIGINAL)** The composition of claim 41 wherein the compound has one of the following structures:



43. **(ORIGINAL)** The composition of claim 1, wherein the compound is present in an amount effective to inhibit metastasis of tumor cells.

44. **(ORIGINAL)** The composition of claim 1, wherein the compound is present in an amount effective to inhibit angiogenesis.

45. **(ORIGINAL)** The composition of claim 1, further comprising a cytotoxic agent.

46. **(ORIGINAL)** The composition of claim 45, wherein the cytotoxic agent is an anticancer agent.

47. **(ORIGINAL)** The composition of claim 1, further comprising a palliative agent.

48. **(ORIGINAL)** A method for treating breast tumor metastasis in a subject comprising:
administering to a subject in need thereof a therapeutically effective amount of the composition of claim 1.

49. (ORIGINAL) The method of claim 48, wherein the dosage is between about 1 mg/kg to about 50 mg/kg of body weight.

50. (ORIGINAL) The method of claim 48, wherein the dosage is between about 0.1 mg/kg to about 40 mg/kg of body weight.

51. (ORIGINAL) The method of claim 48, wherein the dosage is between about 1 mg/kg to about 40 mg/kg of body weight.

52. (ORIGINAL) The method of claim 48, wherein the dosage is between about 0.1 mg/kg to about 30 mg/kg of body weight.

53. (ORIGINAL) The method of claim 48, wherein the dosage is between about 1 mg/kg to about 30 mg/kg of body weight.

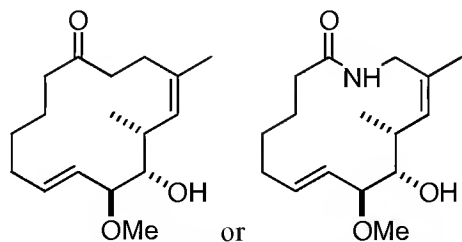
54. (ORIGINAL) The method of claim 48, wherein the dosage is between about 5 mg/kg to about 30 mg/kg of body weight.

55. (ORIGINAL) The method of claim 48, wherein the dosage is between about 0.1 mg/kg to about 20 mg/kg of body weight.

56. (ORIGINAL) The method of claim 48, wherein the dosage is between about 1 mg/kg to about 20 mg/kg of body weight.

57. (ORIGINAL) The method of claim 48, wherein the dosage is 10 mg/kg or greater of body weight.

58. (ORIGINAL) The method of claim 48 wherein in the composition, the compound has one of the following structures:



59. **(ORIGINAL)** The method of claim 58, wherein the composition is administered at a dosage between about 10 mg/kg to about 20 mg/kg of body weight.
60. **(ORIGINAL)** The method of claim 48, further comprising administering a cytotoxic agent.
61. **(ORIGINAL)** The method of claim 60, wherein the cytotoxic agent is an anticancer agent.
62. **(ORIGINAL)** The method of claim 48, further comprising administering a palliative agent.